

REMARKS

By this amendment, claims 1-23 are pending, of which claim 16 is currently amended, and claims 24-26 are newly presented. Claim 21 has been canceled without prejudice or disclaimer. No new matter is introduced.

The Office Action dated 9/12/2011:

(1) rejected claim 16 under 35 U.S.C. § 101 as being directed to non-statutory subject matter;

(2) rejected claims 1, 2, 13, 14, 16/1, 16/2, 16/13, 16/14 and 17-23 under 35 U.S.C. § 102(b) as being anticipated by *Gonzales et al.* (US 5,414,469);

(3) rejected claims 3, 16/3 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Niihara* (US 6,256,344) and *Tahara et al.* (US 5,805,225);

(4) rejected claims 4, 16/4 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Yamauchi* (US 5,729,302);

(5) rejected claims 5, 7, 16/5, 16/7 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Tahara*;

(6) rejected claims 6, 16/6 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Sazzad* (US 6,122,321) and *Tahara*;

(7) rejected claims 8, 16/8 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Nickerson* (US 5,926,222);

(8) rejected claims 9, 10, 16/9, 16/10 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Banerji* (US 6,400,289);

(9) rejected claims 11, 12, 16/11, 16/12 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Lei* (US 6,272,180); and

(10) rejected claims 15, 16/15 under 35 U.S.C. § 103(a) as being unpatentable over *Gonzales* in view of *Kikuchi et al.* (US 5,719,646).

A. 35 U.S.C. § 101 Rejection of Claim 16

In order to advance prosecution and reduce issues for potential appeal in this matter, Applicants have amended claim 16 to recite “A non-transitory computer-readable storage medium,” which excludes transitory signals. Applicants, therefore, submit that claim 16 is thus drawn to statutory subject matter, and respectfully request withdrawal of the rejection under 35 U.S.C. § 101.

B. 35 U.S.C. § 102(b) Rejection of Claims 1, 2, 13, 14, 16/1, 16/2, 16/13, 16/14 and 17-23 Over *Gonzales*

The 35 U.S.C. § 102(b) rejection of claims 1, 2, 13, 14, 16/1, 16/2, 16/13, 16/14 and 17-23 is respectfully traversed.

“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *See also Gilbert & P. Hyatt v. Dudas*, 551 F.3d 1307, 1313-14 (Fed. Cir. 2008); *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002); *In re Rijkaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1992). Specifically, under 35 U.S.C. § 102, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, (Fed. Cir. 1987). Further, “it is not enough that the prior art reference ... includes multiple, distinct teachings that [an ordinary] artisan might somehow combine to achieve the claimed invention.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) Instead, “the prior

art reference must ‘clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.’” *Id.* (quoting *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972)); *See also Therasense Inc. v. Becton, Dickinson and Co.*, 593 F.3d 1325 (Fed. Cir. 2010) (quoting *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1459 (Fed. Cir. 1984)) (“The requirement that the prior art elements themselves be ‘arranged as in the claim’ means that claims cannot be ‘treated ... as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning.’”) Accordingly, “‘unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.’” *Therasense Inc. v. Becton, Dickinson and Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010) (quoting *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008)).

Applicants respectfully submit that the § 102(b) rejection of claims 1, 2, 13, 14, 16/1, 16/2, 16/13, 16/14 and 17-23, however, fails to satisfy these legal tenets, because *Gonzales* fails to disclose or suggest all features of the present claims, in as complete detail and in the manner as set forth thereby, and thus the anticipation rejection cannot be sustained.

For example, independent claim 1 recites, *inter alia*, the feature of “grouping video frames that are only between consecutive I-frames into a video data set.” Further, independent claims 17, 19 and 22 recite similar features. Applicants submit, as presented below, that *Gonzales* neither discloses nor suggests such features.

According to the statement of the rejection, the Examiner contends that:

Re claim 1, Gonzales discloses a method of compressing video (figs. 11, 12a, 12b, 13a, and 13b), comprising: **grouping video frames that are only between consecutive I-frames into a video data set** (Figure 5; column 3, lines 35-49; column 4, lines 16-31; figure 11. The digital video input in figure 11 contains a group of pictures depicted in figure 5 which is comprised of two consecutive I-frames and a set of P-frames and B-frames between the consecutive I-frames. The video frames between the two consecutive I-frames are grouped as “BBP BBP BB” which is considered grouping video frames into a video data set (“BBP” or “BB”), i.e., a higher level of video data set. The group of pictures as shown in figure 5 has a distance between I pictures as $N=9$ and a distance between P-pictures as $M=3$. It is further disclosed that the distances N and M do not have to be constant over an entire sequence, which means the N and M that can be variable distances for grouping video frames (column 4, lines 25-38). **Consequently, each individual P-frame or B-frame is also considered as a video data set, i.e., a lower level of video data set.) ...**

(Office Action, P. 3) Applicants respectfully disagree, and submit that the Examiner’s interpretation of the *Gonzales* reference in view of the presently claimed invention lacks any reasonable factual basis from the teaching of the *Gonzales* disclosure and from any reasonable interpretation of the recitations of the present claims.

Firstly, from the statement of claim 1, it is abundantly clear that a video data set refers to a group of video frames not an individual video frame. As would be commonly understood based on the plain meaning of the claim terms, the term “group” or “grouping” could not reasonably be interpreted as a set (or “data set”) having only a single member (otherwise there would have been no reason to use the term “group” or “grouping”) – instead the terminology would clearly and reasonably be interpreted as denoting a grouping of multiple members. The Examiner’s assertion that “Consequently, each individual P-frame or B-frame is also considered as a video data set” (whether or not actually supported by the *Gonzales* disclosure) is inconsistent with the plain meaning of the feature of “grouping video frames that are only between consecutive I-frames into a video data set,” as recited by claim 1, for example. Secondly, this

interpretation, that each individual P-frame or B-frame is also considered as a video data set, also contradicts the Examiner's own earlier assertion that: "The video frames between the two consecutive I-frames are grouped as **"BBP BBP BB" which is considered grouping video frames into a video data set ("BBP" or "BB").**" With regard to claim 1 (again as an example), there is clearly only one "a video data set" and that is the result of the "grouping video frames" (again, multiple frames). Thirdly, it is also quite clear that Gonzales uses the term group to include more than one frame (or picture):

At the next layer, a sequence is subdivided into sets of consecutive pictures, each known as a Group of Pictures (GOP). [...] There is no limit to the number of pictures which may be in a GOP, nor do there have to be equal numbers of pictures in all GOPs. [...] The third or Picture layer is a single picture.

(Gonzales, Col 3 lines 1-10) From the foregoing, however, one of ordinary skill in the art would understand *Gonzales* as specifying that a group of pictures includes more than one picture although there is no limit to the numbers of pictures (i.e., it can be very large). Furthermore, Gonzales explicitly distinguishes between a single picture and a group of pictures by going to a lower level which is a single picture. Therefore, the Examiner's assertion that "Consequently, each individual P-frame or B-frame is also considered as a video data set" is flawed, and bears no relation to the presently claimed feature of grouping video frames that are only between consecutive I-frames into a video data set.

Moreover, to the extent that the rejection equates the presently claimed feature of "grouping video frames ... into a video data set" to the "group of pictures" or "GOP" of *Gonzales*, according to the cited passage from the *Gonzales* reference in column 3, the disclosure provides that:

Within a GOP, three types of pictures can appear. The distinguishing difference among the picture types is the compression method used. Intramode pictures or I-pictures are compressed independently of any other picture. Although there is no

fixed upper bound on the distance between I-pictures, it is expected that they will be interspersed frequently throughout a sequence to facilitate random access and other special modes of operation. **Each GOP must start with an I-picture and additional I-pictures can appear within the GOP.** The other types of pictures, predictively motion-compensated pictures (P-pictures) and bidirectionally motion-compensated pictures (B-pictures), will be described in the discussion on motion compensation below. A general illustration is shown in FIG. 5.

(*Gonzales*, col. 3, lines 35-49)(*emphasis added*) First, within the context of the layering of an MPEG-1 data stream, and with respect to the Video Sequence Layer, the *Gonzales* reference defines a group of pictures or “GOP” as being at the next layer, wherein “a sequence is subdivided into sets of consecutive pictures, each known as a Group of Pictures (GOP).” (*Gonzalez*, col. 2, line 50 to col. 3, line 5) Then, as is evident from the emphasized portion of the foregoing passage, each GOP, while each GOP is specified as starting with an I-picture, the disclosure expressly provides that additional I-pictures can appear within the GOP. (*Gonzales*, col. 3, lines 43-44) Accordingly, Applicants submit that the *Gonzales* reference does not disclose or suggest that video frames **that are only between consecutive I-frames** are grouped into a video data set, as presently claimed. Indeed, in teaching that a grouping or GOP can have additional I-pictures throughout it, Applicants submit that *Gonzales* in fact teaches the opposite (or away from) the present claim features – whereby a grouping comprises frames that are only between consecutive I-frames.

For at least the foregoing reasons, Applicants, therefore, submit that *Gonzales* fails to anticipate any of the independent claims 1, 17, 19 and 22, and accordingly fails to anticipate any of the claims 2, 13, 14, 16/1, 16/2, 16/13, 16/14, 18, 20 and 23 depending therefrom, and thus respectfully request withdrawal of the rejection under 35 U.S.C. § 102(b).

C. 35 U.S.C. § 103(a) Rejection of Claims 3-12, 15, 16/3-16/12 and 16/15 Over the Cited Combinations of *Gonzales* in view of the Additional References *Niihara, Tahara, Yamauchi, Sazzad, Nickerson, Banerji, Lei and Kikuchi*

Applicants respectfully traverse the 35 U.S.C. § 103(a) rejection of claims 3-12, 15, 16/3-16/12 and 16/15, because all features of the claims are not disclosed by the applied art, either individually or in combination. Claims 3-12, 15, 16/3-16/12 and 16/15 correspondingly depend from independent claims 1 and the Office Action applies the *Gonzales* reference to the rejected claims on the same bases as with the § 102(b) rejection of their respective independent claims (addressed in Section B, above). The Office Action cites to the additional references for the alleged disclosure of various specified features introduced by the rejected dependent claims. Applicants submit, however, that each of the additional references similarly lacks any disclosure or suggestion of the grouping of video frames, which are only between consecutive I-frames, into a video data set, as recited in independent claim 1, and thus fails to remedy the foregoing deficiencies of the *Gonzales* reference. Accordingly, for at least the foregoing reasons, none of the cited combinations of references, render claims 3-12, 15, 16/3-16/12 and 16/15 obvious under 35 U.S.C. § 103(a).

D. New Claims 24-26

New claim 24 is independent, and, similar to the other independent claims, recites the feature whereby the processor groups video frames, which are only between consecutive I-frames, into a video data set. Further, new claims 25-26 depend from claim 24. Accordingly, for at least the reasons presented above with respect to independent claims 1, 17, 19 and 22, Applicants respectfully submit that new claims 24-26 are allowable over the applied art.

E. Conclusion

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney so that such issues may be resolved as expeditiously as possible.

The Director is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Applicant's Deposit Account No. 50-0383; additionally please credit any excess fees to such deposit account.

Respectfully Submitted,

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